

### REMARKS

Applicants appreciate the continued thorough and detailed examination of the present application that is reflected in the third non-final Official Action of November 3, 2004. Applicants also appreciate the Examiner's indication that all of the earlier rejections have been withdrawn. In a sincere effort to advance the present application to allowance, independent method Claim 1, independent system Claim 24 and independent computer program product Claim 44 have been canceled. Many of the dependent claims have been rewritten in independent form, as will be described in detail below. Applicants respectfully submit that the pending claims are not anticipated by Rubenstein et al. (Organic syntheses online: the value of XML, metadata, and community interaction in electronic journals, October 22-25, 2000) ("Rubenstein", sometimes erroneously referred to in the Official Action as "Budenstein") and are unobvious over Rubenstein taken alone or in combination with the earlier-cited Ruger Chemical Web page ("Ruger Chemical"). A detailed claim analysis will be provided below. Moreover, for the sake of brevity, only the method claims will be analyzed. However, analogous reasons apply equally to the system and computer program product claims.

#### **Independent Claims 2, 25 and 45 Are Patentable Over Rubenstein In View of Ruger Chemical**

Claims 2, 25 and 45 were rejected under 35 USC §103(a) as being unpatentable over Ruger Chemical in view of Rubenstein. The Official Action continues to maintain that Ruger Chemical teaches a computerized method of obtaining materials for chemical synthesis by electrically ordering a target chemical or reagent chemicals. As was pointed out in Applicants prior response, the Ruger Chemical website states at Page 1 that Ruger Chemical includes a complete line of emulsifiers, waxes, preservatives, etc. However, these items cannot be electronically ordered, as the listing at Page 1 of Ruger Chemical does not provide links that enable selection of these materials. Stated differently, one cannot "click" on this listing. Moreover, the only provision for ordering is by sending an email to [purchasing@rugerchemical.com](mailto:purchasing@rugerchemical.com). Accordingly, electronic ordering as recited in the claims is not described or suggested by Ruger Chemical.

Moreover, Claim 2 as amended, recites:

accepting user selection from the listing of reagent chemicals, to order the target chemical and/or the reagent chemicals that are used to synthesize the target chemical; and  
generating an electronic order for the target chemical and/or the reagent chemicals that are used to synthesize the target chemical in response to the user input to order the target chemical and/or the reagent chemicals that are used to synthesize the target chemical. (Emphasis added.)

The above-underlined recitations emphasize that the ordering takes place from the listing of reagent chemicals that is displayed. Rubenstein does not describe or suggest any form of electronic ordering and, indeed, the cited Figures 1 and 2 of Rubenstein do not contain any description or suggestion of a provision for electronic ordering. Moreover, even if Rubenstein was somehow combined with Ruger Chemical, the combination would merely suggest that upon deciding that a particular chemical is desired to be ordered, an email could then be sent to purchasing@rugerchemical.com in a separate manual operation. There would be no description or suggestion of the above-quoted recitations of Claim 2. Accordingly, Claims 2, 25 and 45 are patentable over Ruger Chemical in view of Rubenstein for at least these reasons.

Applicants also wish to note that they have amended Claims 2, 25 and 45, and all of the remaining pending claims, to eliminate references to "listings of equipment that is used to synthesize the target chemical", because, on further review, these recitations do not appear to have been considered by the Examiner as a basis for patentability. Claims 2, 25 and 45 also have been amended to eliminate references to procedures because, on further review, these recitations do not appear to have been considered by the Examiner as a basis for patentability. These recitations have been moved to new dependent Claims 64-66.

Dependent Claims 3, 26 and 46 are patentable at least per the patentability of the independent claims from which they depend. Moreover, Claims 4, 27 and 47 have been canceled to expedite allowance. Claims 5, 6, 28, 29, 48 and 49 are patentable at least per the patentability of the independent claims from which they depend. Claims 8, 31 and 51 also are patentable at least per the patentability of the independent claims from which they depend. Finally, Claims 11, 39 and 64 also are patentable at least per the patentability of the independent claims from which they depend.

**Independent Claims 7, 30 and 50 Are Patentable Over Rubenstein**

Claims 7, 30 and 50 were rejected under 35 USC §102(e) as being anticipated by Rubenstein. These claims have now been rewritten in independent form. Claim 7 recites:

7. A computerized method of determining parameters for chemical synthesis comprising:  
accepting a user identification of a reaction type;  
displaying a listing of target chemicals that are synthesized using the reaction type;  
accepting a user selection of a target chemical from the listing of target chemicals that are synthesized using the reaction type; and  
displaying a listing of reagent chemicals that are used to synthesize the target chemical and/or a listing of a procedure that is used to synthesize the target chemical by reacting the reagent chemicals according to the procedure, in response to the user identification of the target chemical. (Emphasis added.)

Accordingly, Claim 7 recites searching by reaction type. In rejecting Claims 7, 30 and 50 at Page 4 of the Official Action, the Official Action cites Rubenstein Page 27, Figure 1 as describing accepting a user identification of a reaction type. Yet, Figure 1 of Rubenstein describes selection of a single chemical and the display of a chemical reaction to produce the chemical, and the procedure used to produce the chemical. There is no description or suggestion in Figure 1 of a user identification of a particular type of reaction. In contrast, exemplary embodiments of searching by reaction type are illustrated, for example, at Figure 18 of the present application, at 1820, where the user is instructed, "Enter the type of reaction you are browsing here (Example: reduction, addition, etc.)", and the user is provided with a button to "Locate Reaction Type". The ability to search on reaction type is simply not described or suggested in Page 27, Figure 1 of Rubenstein. Accordingly, Claims 7, 30 and 50 are patentable for at least these reasons.

**Claims 9, 32 and 52 Are Patentable Over Rubenstein**

At Page 5, the Official Action also indicates that Rubenstein Page 27, Figure 1 anticipates Claims 9, 32 and 52. However, Claim 9 recites:

9. A computerized method of determining parameters for chemical synthesis comprising:  
accepting a user identification of a target chemical;  
accepting a user selection of a desired quantity of the target chemical;  
scaling a listing of reagent chemicals that are used to synthesize the desired quantity of the target chemical; and  
displaying a scaled listing of the reagent chemicals that are used to synthesize the desired quantity of the target chemical, and a listing of a procedure that is used to synthesize the desired quantity of the target chemical by reacting the reagent chemicals according to the procedure, in response to the user identification of the target chemical and the user selection of the desired quantity of the target chemical. (Emphasis added.)

Accordingly, this claim relates to scaling the reagent chemicals in response to user selection of a desired quantity of the target chemical. Exemplary embodiments of scaling are illustrated, for example, in Figures 20 and 21, and are described, for example, at Page 20, lines 1-14 of the present application, as follows:

Referring again to Figure 20, the initial display of Figure 20 may default to 0 grams or 0 moles of the reagent chemicals and 0 quantities of the equipment. In order to allow synthesis of a desired amount of the target chemical, the user input of a number of moles of the chemical may be input at field **2060**, as shown at Block **1742**. At Block **1744**, the listings of the reagent chemicals and equipment are scaled, so as to synthesize the desired quantity of the target chemical. Then, at Block **1750**, a scaled listing of reagent chemicals that are used to synthesize the desired quantity of the target chemical, a listing of equipment that is used to synthesize the desired quantity of the target chemical and a listing of a procedure that is used to synthesize the desired quantity of the target chemical is displayed. Figure 21 illustrates a display procedure that includes the desired quantities of reagents and equipment. Referring again to Figure 17, if a customer desires to electronically order the target chemical, reagent chemicals and/or the equipment, the customer proceeds to transaction (Block **130** of Figures 1A, 1C-1D and 1G), as will be described in detail below.

With all due respect, the scaling recited in Claims 9, 32 and 52 is not described or suggested in Figure 1 of Rubenstein. Accordingly, these claims are patentable for at least these reasons.

**Claims 10, 38 And 63 Are Patentable Over Rubenstein**

Claim 10 recites:

10. A computerized method of determining parameters for chemical synthesis comprising:
- displaying a prioritized listing of target chemicals that match a user query;
  - accepting a user selection of a target chemical from the prioritized listing of target chemicals that match the user query;
  - and
  - displaying a listing of reagent chemicals that are used to synthesize the target chemical and/or a listing of a procedure that is used to synthesize the target chemical by reacting the reagent chemicals according to the procedure, in response to the user identification of the target chemical.

The Official Action again states at Page 5 that Page 27, Figure 1 of Rubenstein describes the claimed prioritized listing. However, the listing in Figure 1 of Rubenstein appears to be in the sequence of page numbers of a journal. In sharp contrast, as recited, for example, at Page 19, lines 5-13 of the present application:

When multiple results are found, a prioritized listing may be displayed, so that more likely desired results are displayed at the top of the listing. In particular, in response to a user input in field **1810** of Figure 18, the name, other\_names and info attributes of the chemical database **216a** may be searched. The results may be displayed in a priority sequence as follows: exact matches in the name attribute; exact matches in the other\_names attribute; partial matches in the name attribute; and, finally, partial matches in the other\_names attribute. By prioritizing the display of results, the more likely user selections may be displayed at the top of the list in Figure 19.

Accordingly, Claims 10, 38 and 68 are patentable over Rubenstein for at least these reasons.

**Claims 18, 41 and 61 Are Patentable Over Ruger Chemical In View of Rubenstein**

Claims 18, 41 and 61 are patentable for the same reasons that were described above in connection with Claims 2, 25 and 45. This analysis will not be repeated for the sake of brevity. Moreover, Claims 19, 42 and 62 are independently patentable because Ruger Chemical does not contain any description or suggestion of generating an electronic order for a kit of the reagent chemicals that are used to synthesize the target chemical. All Ruger Chemical teaches is the possible sending of an email to [purchasing@rugerchemical.com](mailto:purchasing@rugerchemical.com). Similarly, Claims 20, 43 and 63 are independently

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patentable, because Ruger Chemical does not describe or suggest generating an electronic order for a kit of equipment.

**Information Disclosure Statement ("IDS")**

A Third Supplemental IDS is being filed concurrently herewith to cite U.S. Patent 6,403,764 to Dubaquié et al., which was cited in a recent Office Action in continuation-in-part Application Serial No. 10/059,818, and to cite additional prior art of which Applicants have become aware. Applicants respectfully request the Examiner to return the Form PTO-1449A, to indicate that these references were considered.

**Conclusion**

Applicants again appreciate the thorough examination that continues. In order to advance the present application to allowance, many independent claims have been canceled. Applicants respectfully submit that the pending claims are patentable for the reasons that were described above. Accordingly, Applicants respectfully request withdrawal of the outstanding rejections and allowance of the present application.

Respectfully submitted,

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